

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE HONORABLE BOARD OF PATENT APPEALS**

**REPLY BRIEF UNDER 37 C.F.R. 41.41**

The Assistant Commissioner of Patents  
Washington, D.C. 20231  
U.S.A.

Dear Sir or Madam:

The following is a Reply Brief, submitted under the provisions of 37 C.F.R. 41.41 in response to the Examiner's Answer dated June 13, 2008.

## **Response to Examiner's Answer**

On pages 8 and 9 of the Examiner's Answer, Section 10 includes the Examiner's response to specific arguments submitted in Applicant's Appeal Brief.

In section 10(A), the Examiner disagrees with the Applicant's argument that "Yarkosky does not suggest or disclose that the transmission resource allocated for reverse link transmissions is used to "re-transmit the first signal in the downlink direction on the second wireless transmission resource" on page 6, 3<sup>rd</sup> paragraph. The Examiner

alleges that the Applicant is reading more into the claim than is present. Applicant respectfully disagrees.

Claim 1 recites:

a first relay adapted to receive a first signal in the downlink direction on a first wireless transmission resource, perform a first signal translation on the first signal to a second transmission resource, and re-transmit the first signal in the downlink direction on the second wireless transmission resource;

a second relay in a spaced arrangement from said first relay adapted to receive the first signal in the downlink direction on the second wireless transmission resource from the first relay, perform a second signal translation to re-translate the first signal to the first wireless transmission resource, and re-transmit the first signal in the downlink direction;

wherein the first wireless transmission resource is a transmission resource allocated for forward link transmissions from the first transceiver, and the second wireless transmission resource is a transmission resource allocated for reverse link transmissions to the first transceiver.

The first relay is recited to transmit a first signal in a downlink direction on a second wireless transmission resource. The second wireless transmission resource is defined in the final “wherein” clause as being a transmission resource allocated for reverse link transmissions to the first transceiver. Therefore, claim 1 recites that the second wireless transmission resource used for retransmitting the first signal in a downlink direction is a transmission resource intended to be used for reverse link transmission, but is being used for forward link transmissions that occur in a downlink direction from the first transceiver to the at least one second transceiver. This is illustrated in Figure 5 of the present application and the corresponding description of Figure 5 starting on page 15, line 1. Applicant is not reading more into the claim than is explicitly recited.

Applicant maintains that Yarkosky does not suggest or disclose that the transmission resource allocated for reverse link transmissions is used to “re-transmit the first signal in the downlink direction on the second wireless transmission resource”.

In section 10(B), the Examiner disagrees with the Applicant’s argument that the Examiner had not provided a suitable reason why a person of ordinary skill in the art would have combined Yarkosky and Talaie et al. Applicant submits the Examiner has only in the Examiner’s Answer indicated that the combination is alleged to be of a simple substitution of one known element for another to obtain predictable results.

While the Examiner has suggested that this is a case of a “simple substitution” the Examiner has not provided any evidence that such a substitution would indeed be “simple” to one skilled in the art. Simply because CDMA is a known manner of signaling does not *prima facie* establish that one skilled in the art would be capable of using this type of signaling in the presently claimed invention without modifications that may effect the operations of the present invention.

Furthermore, Applicant’s previously submitted argument was based on the Examiner’s previous reason for combining the references, which was “in order to increase capacity” (see page 5 of the Final Office Action dated November 1, 2007), which for reasons provided in the Appeal Brief on pages 9 and 11 was not deemed by Applicant to be a suitable reason for combining the references on its own.

The Examiner alleges in the Examiner’s Answer that “in Talaie it shows that a CDMA signal is pretty well known to be used in a relay system” (emphasis added) based on column 2, lines 34-43 and column 6, lines 55-61 of Talaie et al. Applicant submits that these portions of Talaie et al. are directed specifically to the invention of Talaie et al., not any other examples of CDMA being used in a relay system. Applicant submits that a single example of CDMA being used in a relay system in the manner disclosed by Talaie et al., which Applicant does not concede is similar to the present invention, is not evidence that CDMA is “*pretty well known*” to be used in relay systems.

For at least the reasons above, Applicant maintains that the Examiner has not provided a suitable reason why a person of ordinary skill in the art would have combined Yarkosky and Talaie et al.

In Section 10(C), the Examiner disagrees with the Applicant's argument that the Examiner had not provided a suitable reason why a person of ordinary skill in the art would have combined Yarkosky and Tirabassi et al. Applicant submits the Examiner has only in the Examiner's Answer indicated that the combination is alleged to be of a simple substitution of one known element for another to obtain predictable results.

While the Examiner has suggested that this is a case of a "simple substitution" the Examiner has not provided any evidence that such a substitution would indeed be "simple" to one skilled in the art. Simply because Tirabassi et al. describes "The Ka wideband data transmitted on a satellite uplink is typically frequency division multiplexed (FDM) and further divided by time division multiplexing (TDM) into slots occupied by a transmission burst" does not prima facie establish that one skilled in the art would be capable of using this type of transmission resource, which Applicant does not concede is similar to the present invention, in the presently claimed invention without modifications that may effect the operations of the present invention.

The Examiner does not appear to give any weight to the difference in the subject matter of Tirabassi et al. and the presently claimed invention, and whether one skilled in the art would even be expected to be aware of Tirabassi et al. based on those differences.

The Examiner alleges that "in Tirabassi it shows that a TDM/FDM signal is pretty well known to be used in a relay system" (emphasis added) based on Figure 2 of Tirabassi et al. and column 5, lines 1-21. Applicant submits that these portions of Tirabassi et al. are directed specifically to the invention of Tirabassi et al., not any other examples of TDM/FDM being used in a relay system. Applicant submits that a single example of TDM/FDM being used in a relay system, at least in the manner disclosed by Tirabassi et al., which Applicant does not concede is at all similar to the present invention, is not evidence that TDM/FDM is "pretty well known" to be used in relay systems.

For at least the reasons above, Applicant maintains that the Examiner has not provided a suitable reason why a person of ordinary skill in the art would have combined Yarkosky and Tirabassi et al.

Respectfully submitted,

DAVID FALCONER ET AL.

By   
Mark S. Starzomski  
Reg. No. 62,441

Smart & Biggar  
P.O. Box 2999, Station D  
900-55 Metcalfe Street  
Ottawa, Ontario K1P 5Y6

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